

Chapter 9

A Sixth Force in the Structure of the Cosmos

Students of modern physics have been made aware of the force field of gravity. In Einsteinian theory, gravity is not a force pulling from a distance but a force field created by the presence of mass. Gravity is a very weak force field. Each of my 170 pounds changes the shape of space around me, but this change is very, very small. On the other hand, the great mass of the Earth changes space considerably. It alters space in such a way that objects accelerate toward the center of that mass at approximately 32 ft per second per second. If I drop my pencil, it falls to the floor. Gravity is one of the primary force fields of the cosmos.

Electromagnetism is another. If you place a magnet under a piece of paper covered with iron filings, you see the filings line up with the fields of force created by the magnet. Electromagnetic fields operate in what we call "electricity." We also use the notion of electromagnetic fields to describe waves of light, ultraviolet rays, X rays, radio waves, and more. Electromagnetism is another basic force field that characterizes the cosmos.

Within the interior processes of the atom, modern physics has discerned two more fields of force, typically called the strong force and the weak force.

Most physicists have claimed that these four basic forces are sufficient to explain the physical behavior of the cosmos. Other physicists have claimed that none of these force fields explain the phenomena of inertia. Why does an object set in motion continue in motion unless acted upon by another force? A fifth force field has been proposed, Higg's field.¹

These four or five fields of force provide an amazing array of wisdom about the manner in which our cosmos functions, but none of these fields explains life. None of them explains the presence of consciousness and of choice in the structure of the cosmos. Biologists have attempted to explain how physical processes can become living processes, but none of these explanations are convincing. From the laws of physics we cannot explain how the soil, air, and fluids of planet Earth sprouted living beings. How and why those enclosures of sensitivity and response came into being remains an unexplained mystery.

So let us assume a proposition that few biologists and still fewer physicists would even consider: **life/consciousness is a sixth force field in the structure of the cosmos.** Let us assume that whenever conditions are favorable, this force field kicks into action; consciousness begins making its choices, initiating its specific journeys of trial and error toward the goal of becoming more conscious and more practically effective in the environments in which it lives. Can we say that such a dynamic in the cosmos is less likely than the existence of gravity? The reason such an assumption seems outlandish to most physicists and biologists is that consciousness must then be viewed as not accessible to the physical or biological sciences. Consciousness can only be viewed inwardly by consciousness itself. Therefore, the strict empiricist is excluded from exploring consciousness and life directly.

When we creatures with human consciousness view gravity, we are doing something different than when we view consciousness. Gravity can only be viewed when consciousness "looks" outside the body in which this consciousness is living. Consciousness can only be viewed when consciousness "looks" inside the body in

¹ For more on Higg's field see Greene, Brian; *The Fabric of the Cosmos* (Vintage Books 2005) page 257

which this consciousness is living. We cannot see consciousness with the external view. Externally, we can see brains and nerves and genes and behaviors of living beings, but we cannot see consciousness. We only view consciousness when we look within our own now presently living consciousness. Externally, we can each hear reports from conscious beings through the motions and noises that these living beings make, but we do not hear consciousness itself. We base our assumption of the existence of consciousness in other living beings upon our experience of consciousness within our own living beings. This truth about consciousness is an offense to the usual assumptions of the physicists and biologists that consciousness will someday be explained by reducing it to one or more of the physical forces of physics.

If a direct experience of consciousness can only be had by our inward looking consciousness itself, we are stating an absolute limitation upon the scope of empirical science. This limitation on observation is not the case when we observe the array of factors we call "gravity," "electromagnetism," etc. All these forces are discerned by looking outward, by giving rational form to our outward experiences – experiences we have formulated into specific facts and have tested and retested in publicly repeatable experiences that a whole community of observers can observe.

Consciousness, however, must be explored within the singular person by the consciousness of that singular person. A community of persons can then compare notes on what they have discovered within, but the experiences involved are not objective facts of empirical construction but interior noticings by human noticers. In terms of a strict definition of empirical science, interior noticing is not "scientific." Nevertheless, consciousness is something "objective" in this sense: **consciousness is there to be noticed**. Consciousness is not simply an abstract idea that has no reference in experience. Consciousness is an actuality about which ideas have been and can be formulated. Consciousness is part of the structure of the cosmos. However different from empirical science our approach to this mysterious verity needs to be, consciousness is no less real than gravity.

If consciousness is a field of force in the cosmos, it is a field of force that is invisible to the scientific approach to truth. Its consequences are visible, but its "thereness" is not. We have to employ the contemplative approach to truth in order to notice consciousness. When we employ the "We" approach of truth, we can meld into our cultural overviews the truth of consciousness, the truth about consciousness, and the hypothesis that consciousness is or may be another force field in the structure of the cosmos.

The assumption that consciousness is a sixth force field in the structure of the cosmos does not make necessary the assumption of a second universe alongside the universe described by physics. Consciousness is just another enigmatic force in the same universe as gravity. Nor does the assumption that consciousness is a sixth force justify belief in a supreme being alongside this one reality we experience inwardly and outwardly. Nor need we assume that consciousness is a mighty force that causes everything else. Consciousness is a history-creating force along with other history creating forces, but this need not mean that consciousness has some sort of infinite standing. Seeking these and other truths about consciousness is simply a matter of noticing its functioning within our own lives.

In the chapters that follow, I am going to report on my noticings about this sixth force of the cosmos. This can become a discussion and a joint project of understanding only if you, the reader, "look" into your own inner world of consciousness to see if my reports correspond with your experiences. Indeed, I have been clarifying my own noticing by hearing the reports of many other explorers of that inner realm to which each of us has access. This nonscientific contemplative exploration is in its own way objective, for consciousness and the phenomena of consciousness are indeed real – real

dynamics that challenge our thinking minds to invent ever more profound clarity about them. Consciousness is an enigmatic reality in which we all dwell. So for the time being, let us just assume that consciousness is a sixth force field in the structure of the cosmos.